

ther : it follows by adding equal things to equal things, that the Refractions at K and H taken together, are equal to the Refractions at J and L taken together, and therefore the two Rays being equally refracted have the same Inclination to one another after Refraction which they had before, that is the Inclination of half a Degree answering to the Sun's Diameter. For so great was the Inclination of the Rays to one another before Refraction. So then, the length of the Image P T would by the Rules of Vulgar Opticks subtend an Angle of half a Degree at the Prism, and by consequence be equal to the breadth vw ; and therefore the Image would be round. Thus it would be were the two Rays XLJT and YKHP and all the rest which form the Image P T vw , alike Refrangible. And therefore seeing by Experience it is found that the Image is not round but about five times longer than broad, the Rays which going to the upper end P of the Image suffer the greatest Refraction, must be more Refrangible than those which go to the lower end T, unless the inequality of Refraction be casual.

This Image or Spectrum P T was coloured, being red at its least refracted end T, and violet at its most refracted end P, and yellow green and blew in the intermediate spaces. Which agrees with the first Proposition, that Lights which differ in Colour do also differ in Refrangibility. The length of the Image in the foregoing Experiments I measured from the faintest and outmost red at one end, to the faintest and outmost blew at the other end.

Exper. 4. In the Sun's beam which was propagated into the Room through the hole in the Window-shut, at the distance of some Feet from the hole, I held the Prism in such a posture that its Axis might be perpendicular to that beam. Then I looked through the Prism upon the hole,

hole, and turning it so that its Axis might be perpendicular to the beam, I made the Image of the Sun appear between its two sides, and so I stopt the Prism so that its refracting Angle might be perpendicular to the former Experiment. I then looked through it to the refracted Image, and that the most refracted end of the least refracted end was yellow in order. I then moved the Prism so that its Axis might be perpendicular to the beam through it upon the Sun's Image. Clouds beyond the Prism regularly according to the Angle of Incidence and Refraction of the refracted Image.

So then, by the same equal Incidences and Refractions : But v that some of the others less, consist of the same Ray is by the same, and as it were seen as *Grimaldo* supposed in his Experiments, but will not.

Exper. 5. Consequence of the Experiment the Image of the Sun appeared in an oblong form, by any other cause, the oblong Image would always be drawn out of the refraction of the Rays.